



The State of New Hampshire  
*Department of Environmental Services*



Michael P. Nolin  
Commissioner

April 18, 2006

The Honorable Bob Odell, Chairman  
Senate Energy & Economic Development  
Room 102; LOB  
Concord, New Hampshire 03301

**RE: House Bill 1289, Relative to Pennichuck Brook and its watershed**

Dear Senator Odell:

Thank you for the opportunity to comment on HB 1289 which would establish land use restrictions and other requirements for the protection of Pennichuck Brook and its watershed. DES supports this legislation and would like to provide the committee with the following information.

RSA 485:24 currently provides DES with the authority to adopt rules "as it may deem best to protect the water or ice supply against any dangerous contamination." DES has adopted such rules on a case-by-case basis in Part Env-Ws 386, and readopted those rules with amendments on November 23, 2005. Currently, Env-Ws 386.50 contains provisions for the protection of Pennichuck Brook, which is the principal water supply source for Pennichuck Water Works, serving the city of Nashua and portions of surrounding communities.

The watershed of Pennichuck Brook is highly developed, with a mix of suburban and increasingly urban land uses. DES considers any development in a water supply watershed to represent a potential threat to the quality of the water supply source. Studies by the American Water Works Association and the Trust for Public Lands indicate that decreased forest cover in a water supply watershed is associated with the need for more extensive treatment of the raw water in order to meet applicable standards for human consumption, and consequently higher treatment costs.

Historically, the trend in drinking water regulation has been for increasingly stringent health-based water quality standards for an ever-growing list of contaminants. Making matters more difficult, the disinfection of surface waters with chlorine compounds creates byproducts which themselves pose a health risk. Therefore, DES, the U.S. Environmental Protection Agency, and the U.S. water supply profession do not consider treatment alone to be the preferred approach to ensuring safe drinking water. The preferred approach, the so-called multiple-barrier approach, includes source protection as a key component. In an ideal environment, source protection consists of maintaining a water supply watershed in its natural state. In the real world, source protection is a balancing act involving a variety of interests and objectives.

A well-accepted approach to balancing water quality considerations with private property rights is to focus on the preservation or protection of land immediately adjacent to rivers, streams, and other water bodies, because the protection of such buffers is effective at reducing the loading of pollutants carried in runoff. This is the approach emphasized by the N.H. Shoreland Protection Act (RSA 483-B) and similar statutes in other states. Unfortunately, RSA 483-B does not provide any protection for Pennichuck Brook or its tributaries because they are not fourth-order streams.

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Land now or formerly owned by Pennichuck Water Works (PWW) provides protected buffers along portions of Pennichuck Brook and the Pennichuck ponds under a 1983 Public Utilities Commission order, and municipalities in the watershed have established buffers ranging from 25 to 225 feet. A 1998 Watershed Management Plan prepared by a consultant for Pennichuck Water Works evaluated the full range of threats facing the water supply, and recommended the protection of a 400-foot buffer zone around the Pennichuck ponds and 200 feet along all tributaries and wetlands, mirroring the Commonwealth of Massachusetts approach to protecting the Metropolitan District's water supply sources. Also in 1998, PWW proposed changes to Env-Ws 386.50 that would have increased protective setbacks to 250 feet along Pennichuck Brook, the ponds, and their tributaries. HB 1289 is consistent with language contained a draft DES watershed rule which resulted from a number of discussions with DES, representatives of the watershed communities (Nashua, Amherst, Hollis, Merrimack, and Milford) and the general public. DES considers the approach embodied in HB 1289 to be sound. Taken together with other efforts of PWW and the City of Nashua to protect Pennichuck Brook, it provides important protection for the water supply source serving Nashua and portions of the surrounding towns.

Thank you again for the opportunity to comment on this legislation. If you have any questions or need additional information, please do not hesitate to call Sarah Pillsbury at 271-1168 or me at 271-3449.

Sincerely,  
  
Michael P. Nolin  
Commissioner

cc: Representative Balboni  
Representative Martin  
Representative Hills  
Harry T. Stewart, DES Water Division Director  
Sarah Pillsbury, DES